



Fire Controlman (FC)

July 2021





United States Navy Ethos

We are the United States Navy, our Nation's sea power - ready guardians of peace, victorious in war.

We are professional Sailors and Civilians - a diverse and agile force exemplifying the highest standards of service to our Nation, at home and abroad, at sea and ashore.

Integrity is the foundation of our conduct; respect for others is fundamental to our character; decisive leadership is crucial to our success.

We are a team, disciplined and well-prepared, committed to mission accomplishment. We do not waver in our dedication and accountability to our Shipmates and families.

We are patriots, forged by the Navy's core values of Honor, Courage and Commitment. In times of war and peace, our actions reflect our proud heritage and tradition.

We defend our Nation and prevail in the face of adversity with strength, determination, and dignity.

We are the United States Navy.



The Sailor's Creed

I am a United States Sailor.

I will support and defend the Constitution of the United States of America and I will obey the orders of those appointed over me.

I represent the fighting spirit of the Navy and those who have gone before me to defend freedom and democracy around the world.

I proudly serve my country's Navy combat team with Honor, Courage, and Commitment.

I am committed to excellence and the fair treatment of all.

CAREER ROADMAP

Seaman Recruit to Master Chief Roadmap

The educational roadmap below will assist Sailors in the Fire Controlman community through the process of pursuing professional development and advanced education using various military and civilian resources e.g. PQS program; JST Joint Service Transcript; E-Learning; Navy College Network; etc. Successful leadership is the key to military readiness and will always require a high degree of technical skill, professional knowledge, and intellectual development.

What is a Career Roadmap for Fire Controlman?

Fire Controlman roadmaps are just what the name implies - a roadmap through the Enlisted Learning and Development Continuum from Seaman Recruit through Master Chief. The principal focus is to standardize a program Navy wide by featuring the existing skills necessary to be successful in the Navy. The ultimate goal of a roadmap is to produce a functional and competent Sailor.

What is the Enlisted Learning and Development Continuum?

Enlisted Learning and Development Continuum is the formal title given to the curriculum and process building on the foundation of Sailorization beginning in our Delayed Entry Program through Recruit Training Command and throughout your entire career. The continuum combines skill training, professional education, well-rounded assignments, and voluntary education. As you progress through your career, early-on skill training diminishes while professional military education gradually increases. Experience is the ever-present constant determining the rate at which a Sailor trades skill training for professional development.

Do Sailors have to follow the Roadmap?

Yes. The Fire Controlman roadmap includes the four areas encompassed by the Continuum in Professional Military Education to include; Navy Professional Military Education (NPME), Joint Professional Military Education (JPME), Leadership and Advanced Education.

Some training and education is mandatory (Recruit Training, FC "A" School at Naval Station Great Lakes, IL, E-Learning, etc.). Some may be directed by your chain of command (Microsoft Excel and PowerPoint courses), and the remainder is voluntary (MNP, E-Learning, college courses, etc.). Sailors are advised to seek out mentors, including your Command Master Chief, Senior Enlisted Advisor, Leading Chief Petty Officer, Leading Petty Officer and Command Career Counselor, and to make use of your Navy College Virtual Education Center (VEC) or OCONUS Education Office's vast resources. All are uniquely qualified to help you along the way.

Notes:



FC CAREER PATH (SW)



Fire Controlmen (FC). FCs are technicians responsible for the operation, maintenance, testing, troubleshooting and repair of: RADARs, computers, networks, data display systems and integrated weapon system components. Fire Controlmen are knowledgeable in basic electricity/electronics, digital fundamentals, synchros, servos, RADAR principals, the fire control problem, gun ballistics, missile systems and computer fundamentals. FCs serve on most classes of surface ships and are trained in maintenance and operation of variety of weapon systems.

YEARS OF SERVICE	CAREER MILESTONES	AVERAGE TIME TO PROMOTE	COMMISSIONING OR OTHER SPECIAL PROGRAMS	SEA/ShORE FLOW	TYPICAL CAREER PATH DEVELOPMENT
28-30	FCCM	20.1 Yrs	CSEL, Enlisted Comm. Mgr.	36	4 th Shore Tour Billet: ECM/TECHAD, CSEL, Training Manager, FC Administrator. Duty: BUPERS, FFC, SURFOR, TSC, NAWCD, CSCS, OPTEVFOR
24-28	FCCM FCCS	20.1 Yrs 17.8	CSEL, CWO	48	4 th Sea Tour Billet: CSSE/Dept LCPO, Fleet/Staff TSM. Duty: CVN, LHA, LHD, Fleet Staff/CSG, DESRON Qualification: TAO/SUWC/Strike Officer
21-24	FCCM FCCS FCC	20.1 Yrs 17.8 12.4	CWO, CSEL Instructor, RDC, Recruiter, Detailer, Enlisted, Senior Enlisted Academy	36	3 rd Shore Tour Billet: ECM/TECHAD, Fire Control Administrator Lead Instructor, Combat System Development / Test / Evaluation. Duty: BUPERS, ATG, CSCS, TSC, OPTEVFOR, NAVSEA, SURFOR. Qualification: CDO/SDO
17-21	FCCS FCC FC1	17.8 Yrs 12.4 7.1	CWO, CSEL, Senior Enlisted Academy	48	3 rd Sea Tour Billet: Lead Fire Controlman, Dept. LCPO, CSSE, Fleet/Staff TSM Duty: CVN, LHD, DESRON Fleet Staff/CSG. Qualification: Warfare Coord, TA/LAC, Boarding Officer, ITT Member, CSTT Leader
14-17	FCCS FCC FC1	17.8 Yrs 12.4 7.1	LDO, CWO, Instructor, RDC, Recruiter, Detailer	36	2 nd Shore Tour Billet: Instructor, RDC, Recruiter, Tech Rep, Trainer, Detailer. Duty: ATG, CSCS, TSC. Millington. Qualification: ATS, MTS, CDO/SDO.



FC CAREER PATH (SW)



YEARS OF SERVICE	CAREER MILESTONES	AVERAGE TIME TO PROMOTE	COMMISSIONING OR OTHER SPECIAL PROGRAMS	SEA/SHORE FLOW	TYPICAL CAREER PATH DEVELOPMENT
9-14	FCC FC1 FC2	12.4 Yrs 7.1 3.2	LDO, CWO, OCS, MECP	60	2 nd Sea Tour Billet: Lead Technician, LPO, LCPO, Staff TSM, TSM. Duty: Ship, Fleet Staff, CCSG. Qualification: CSC, CSOOW, SUWC, TSC/LAC, ECO, EAWS CSTT Evaluator, ABO, ATTT Team Leader/or assistant
6-9	FC1 FC2	7.1 Yrs 3.2	LDO, STA-21, OCS, MECP, Instructor, RDC, Recruiter	36	1 st Shore Tour Billet: Instructor, RDC, Recruiter, Maintenance Tech. Duty: ATG, CSCS, TSC, RTC, NRD. Qualification: ATS, MTS
2-6	FC2 FC3	3.2 Yrs 1.6	STA-21, Naval Academy, NROTC	60	1 st Sea Tour Billet: Maintenance Technician. Duty: Ship. Qualification: CSMC, Area Supervisor, WCS, CSTT, ATTT Member SCAT/VBSS Team Member, ESWS
1+/-	FCSA/SN	11 Months			Recruit Training, "A" and "C" Schools

Notes:

1. "A" School and Security Clearance is required.
2. Deployable Sea and Land components located in the 7th Fleet AOR, 6th Fleet AOR and 5th Fleet AOR are extremely arduous with deployable units being out of homeport well above CONUS average.
3. Instructor Duty and Training Support Center billets can prevent a member from being in a leadership position. This fact is due to the sheer number of Chief Petty Officer and First Class billets at schoolhouses/TSC.
4. Billet base for E5 imbalanced for shore duty, which may preclude a Sailor's opportunity for an in-rate shore tour. Sailors electing to stay at sea might not follow normal sea-shore flow.
5. Tours at NPC and BUPERS require special screening and are highly competitive in nature.
6. Typically, on smaller platforms, FCs are substantially involved in ATTT.
7. The Littoral Combat Ship (LCS) uses a Train to Qualify (T2Q) concept. These Sailors will be in a T2Q (ACC 106) status while they receive the unique training required to fill these hybrid billets. LCS' hybrid billets require significant training time, up to 18 months. Periodic and transfer evaluations while in T2Q will normally be "Not Observed" or will lack competitive rankings. T2Q time does not count against sea tour requirement. Sea shore flow may appear abnormal due to significant training time required. "Off-hull" time is used for unit level training,



FC CAREER PATH (SW)



qualification, technical schools, and leave. Unplanned losses may cause a Sailor to transfer from one crew to another crew and should not be seen as negative.

a. Shore duty

- COMLCSRONONE and COMLCSRON TWO are the LCS ISIC's and are responsible to train and certify crews in most mission areas. ISIC training teams are similar to Afloat Training Group (ATG) in their scope of responsibility to train and certify.
- LCS is not a closed-loop community. Transferring from sea to shore, or shore to sea, is highly desirable because it recycles experience within the program.
- The Littoral Training Facility (LTF) provides the unit level training that is traditionally conducted during basic and intermediate phase. LTF scores are equivalent to ATG level warfare area drills and inspections.

b. Mission Packages

- Per CNO direction, Surface Warfare (SUW), Antisubmarine Warfare (ASW), and Mine Warfare (MIW) Mission Packages permanently merged with "core" crews. This will reflect as a mid-tour UIC shift and is not derogatory.
- Before the merger, Mission Packages were independent from the crew with their own OIC and SEL, similar to deployed helicopter detachments. Any qualification of crew watch stations (DSO, CSM, TSCE) was outside of their normal scope of duty.
- VBSS is a primary warfare area for Surface Division ships.

c. Watch equivalents and acronyms

- CSM – Combat Systems Manager (only on the Independence variant. LCS-2, LCS-4, LCS-6, LCS-8 etc.). CSM combines the duties of SUWC, EW Sup, RSC, and CSRO
- DSO – Defensive Systems Operator (only on the Freedom variant, LCS-1, LCS-3, LCS-5, LCS-7 etc.). DSO combines the duties of SUWC, EW Sup, RSC, and CSRO
- GCO – Gun Console Operator
- JOOD – Significant responsibility in LCS due to limited number of underway bridge watchstanders.
- MPC – Mission Package Coordinator
- MPCE – Mission Package Computing Environment
- TSCE – Total Shipboard Computing Environment. Interchangeable in the LCS community with CSOOW

In addition to the above career path, an FC is advanced due to their proven leadership, qualifications and performance against competition, regardless of billet assigned.

Considerations for promotion from E6 to E7

1. Sea Assignments (all)

- Manning structure aboard a ship limits opportunity to serve in LPO positions
- Qualified (I/P) OOD, CSOOW, Duty Dept. Head; (U/W) CSOOW; (LCS) GCO
- Advanced Qualifications (I/P) ATTWO; (U/W) SUWC, AAWC, ADWC, TSC/LAC/TA, CSC; (LCS) MPC
- Achieve all Warfare qualifications available at command
- Training Team member (Primary CSTT/ATTT) (VBSS and ITT)
- Asst. Command Collateral for major program with documented impact
- Active First Class Mess involvement with documented impact
- Sailor 360 involvement, preferably leading a committee

2. Shore Assignments (all)

- Billet base for FC is sea duty centric, which may preclude opportunity for an in-rate shore tour
- FC "A" or "C" School Instructor/Course Supervisor/ CSCS Det. (MTS during tour); Advanced Qualification: Training Manager



FC CAREER PATH **(SW)**



- TSC- Barracks LPO (NMTI with MTS during tour)
- ATG (ATS during tour)
- RMC Maintenance Technician with documented repairs
- NPC (Detailer)
- RDC (MTS during tour)
- Enlisted Recruiter
- LCSRON or DIVRON Training Team (ATS during tour)
- Littoral Training Facility (MTS during tour)
- Asst. Command Collateral for major program with documented impact
- Active FCPOA involvement with documented impact
- Sailor 360 involvement, preferably leading a committee

Considerations for promotion from E7 to E8

1. Sea Assignments (all)
 - Successful Divisional LCPO/ CSSE tour at an operational command; (LCS) SUW Det. SEL tour
 - Achieve all Warfare qualifications available at command
 - Qualified (I/P) Section Leader; (U/W) CSOOW, SUWC, ADWC, TSC/LAC/TA, Boarding Officer (if VBSS); (LCS) MPC
 - Advanced Qualifications (I/P) ATTWO; (U/W) CICWO, CSC, CSRO, AAWC, Strike Officer; (LCS) DSO, CSM, LCS JOOD
 - Training Team Member/Lead (Primary CSTT/ATTT) (VBSS and ITT)
 - Command collateral with documented impact
 - Active CPO Mess involvement with documented impact
 - Sailor 360 involvement and leading a committee
2. Shore Assignments (all)
 - Course Supervisor/Training Manager at FC "A" or "C" School/ CSCS Det. (MTS during tour)
 - TSC- Barracks LCPO (NMTI with MTS during tour)
 - Waterfront Trainer and Assessor ATG (ATS during tour)
 - RMC Maintenance Technician and Trainer
 - NPC (Detailer)
 - RDC (MTS during tour)
 - LCSRON or DIVRON Training Team/Lead (ATS during tour)
 - Littoral Training Facility (MTS during tour)
 - Command collateral with documented impact
 - Active Mess/CPOA involvement with documented impact
 - Sailor 360 involvement and leading a committee.
 - Qualified Assessor, ACDO/CDO/SDO

Consideration for promotion from E8 to E9

1. Sea Assignments (all)
 - Successful Dept. LCPO / CSSE tour at an operational command; (LCS) SUW Det. SEL tour
 - Multiple warfare qualifications (Achieve all Warfare qualifications available at command)
 - Qualified (I/P) Section Leader; (U/W) CSC, CSRO, CICWO, ADWC; LAC/TA (LCS) DSO, CSM
 - Advanced Qualifications (I/P) CDO, Senior Enlisted Section Leader (CVN), Senior Enlisted Watch Bill Coordinator; (U/W) AAWC, Strike Officer; (DESRON) STAO, (CVN) TAO, (LCS) LCS JOOD
 - Training Team Leader/Member (Primary ATTT Overall/CSTT) (VBSS and ITT)
 - Major command collateral with documented impact
 - Active CPO Mess (with documented leadership and involvement)



FC CAREER PATH (SW)



- Sailor 360 involvement and Leader/Coordinator
2. Shore Assignments (all)
- Training Manager/ Lead Instructor/ Maintenance Lead at FC “A” or “C” School/ CSCS Det. (MTS during tour)
 - TSC- Dept. LCPO (NMTI with MTS during tour)
 - Waterfront Trainer and Assessor ATG(Team Lead, ATS Program Coordinator, qualified ATS during tour)
 - RMC Field Maintenance Technician with documented repairs
 - BUPERS (ECM/ TECHAD)
 - NPC (Lead Detailer)
 - RDC (MTS during tour)
 - LCSRON or DIVRON Training Team Lead (ATS during tour)
 - Littoral Training Facility (MTS during tour)
 - SURFOR/PAC/LANT (Fire Control Administrator)
 - OPTEVFOR (System Development/Evaluation)
 - Qualified Assessor, ACDO/CDO/SDO/AOIC.
 - Major command collateral with documented impact
 - Active Mess/CPOA involvement with documented impact
 - Sailor 360 involvement and Leader/Coordinator



FC CAREER PATH SELECTED RESERVE (SELRES)



Fire Controlmen are technicians responsible for the operation, maintenance, testing, troubleshooting and repair of: RADARs, computers, networks, data display systems and integrated weapon system components. Fire Controlmen are knowledgeable in basic electricity/electronics, digital fundamentals, synchros, servos, RADAR principals, the fire control problem, gun ballistics, missile systems and computer fundamentals. FCs serve on most classes of surface ships and are trained in maintenance and operation of variety of weapon systems.

YEARS OF SERVICE	CAREER MILESTONES	AVERAGE TIME TO PROMOTE	COMMISSIONING OR OTHER SPECIAL PROGRAMS	SEA/ShORE FLOW	TYPICAL CAREER PATH DEVELOPMENT
28-30	FCCM	20.1 Yrs	CSEL	N/A	Billet: OIC, CSEL, Training Manager, AOIC Duty: COMPACFLT, COMUSFFC, COMSECFLT, COMTHRIDFLT, NSSC, NAVSEA, SPAWAR, MSC, NSY, NSWCD Qualification: Major Command CMC
24-28	FCCM FCCS	20.1 Yrs 17.8	CSEL	N/A	Billet: OIC, CSEL, Dept LCPO Duty: COMPACFLT, COMUSFFC, COMSECFLT, COMTHRIDFLT, NSSC, NAVSEA, SPAWAR, MSC, NSY, NSWCD Qualification: CDO, Regional CMC/ CSC
21-24	FCCM FCCS FCC	20.1 Yrs 17.8 13.5	CWO, CSEL	N/A	Billet: CSEL, Dept LCPO Duty: COMPACFLT, COMUSFFC, COMSECFLT, COMTHRIDFLT NSSC, NAVSEA, SPAWAR, MSC, NSY, NSWCD Qualification: CDO, Warfare Coordinator, Program Recruiter, MOC Watchstander
17-21	FCCS FCC FC1	17.8 Yrs 13.5 8.5	CWO, CSEL	N/A	Billet: CSEL, Dept LCPO, CSSE. Duty: COMSECFLT, COMTHRIDFLT COMLCSTRON, CORIVRON, CSG4, CSG15, TACTRAGRU, NAVSEA, SPAWAR Qualification: MOC Watchstander, Warfare Coordinator, ECO, ITT Member, CSTT Leader
14-17	FCCS FCC FC1	17.8 Yrs 13.5 8.3	LDO, CWO, CSEL	N/A	Billet: CSEL, Dept LCPO, LPO Duty: COMLCSTRON CORIVRON, CSG4, CSG15, TACTRAGRU, NAVSEA, SPAWAR, OSU Qualification: ATS, MTS, RINC.



FC CAREER PATH SELECTED RESERVE (SELRES)



YEARS OF SERVICE	CAREER MILESTONES	AVERAGE TIME TO PROMOTE	COMMISSIONING OR OTHER SPECIAL PROGRAMS	SEA/SHORE FLOW	TYPICAL CAREER PATH DEVELOPMENT
9-14	FCC FC1 FC2	13.5 Yrs 8.5 3.9	LDO, CWO, OCS, MECP	N/A	Billet: LPO, LCPO. Duty: COMLCRON CORIVRON, CSG4, CSG15, TACTRAGRU, NAVSEA, SPAWAR, MSC , OSU Qualification: FPTT Team Leader/or assistant.
6-9	FC1 FC2	8.5 Yrs 3.9	LDO, STA-21,OCS, MECP	N/A	Billet: Work Center Supervisor, Maintenance Tech. Duty: COMLSCRON CORIVRON, NSW, OSD, CSCS, NAVSEA, SPAWAR, ACU, OSU Qualification: CSC, CSOOW, SUWC, LAC, ECO, EAWS CSTT Evaluator, EXW MTS, RINC.
2-6	FC2 FC3	3.9 Yrs 1.2	STA-21, Naval Academy, NROTC	N/A	1 st Sea Tour Billet: Maintenance Technician. Duty: Ship. Qualification: CSMC, Area Supervisor, CSTT ATTT Member SCAT/VBSS Team Member, ESWS
1+/-	FCSA/SN	9 Months			Recruit Training, "A" and "C" Schools.

Notes:

- "A" School is required for this rating.
- This is not a compressed rating.
- SELRES FC's should show diversity in billets throughout their careers and include Active Duty for Training (ADT), Active Duty for Special Work (ADSW), and mobilizations in support Sea, Shore and Expeditionary Commands.
- Typically, FCs are substantially involved in ATPF. When able, SELRES Sailors should try to earn a Warfare qualification.
- Rating NECs:

704B - Ship Self Defense System (SSDS) MK1 Operator
V61B - MK 46 MOD 2 Gun Weapon System (GWS) Technician
V01A - ACB-12 Gun Computer System (GCS) MK 160 MODs 14-16/Electro-Optical Sensor System (EOSS) MK 20 MOD 0 Fire Control (FC) Technician
V02A - Close-In Weapon System (CIWS) Phalanx Block 1B Baseline 2 Technician
V10A - Rolling Airframe Missile (RAM) MK-31 Mod 1 & 3 Guided Missile Weapons Systems Technician
V15A - Gun Computer System (GCS) MK 160 MOD 11/Electro-Optical Sensor System (EOSS) MK 20 MOD 0 Fire Control



FC CAREER PATH SELECTED RESERVE (SELRES)



Technician

V17A - GCS MK-160 MOD 4 Fire Control Technician
V18A - CIWS MK-15 BLOCK 11-14 Technician
V19A - Phalanx Close-In Weapon System MK 15 MOD 21, 22, and 25 (BLOCK IB) Technician
V20A - Tactical Tomahawk Weapon Control System (TTWCS) Operation and Maintenance (O&M) Technician
V21A - GCS MK 160 MOD 8/OSS MK 46 MOD 1 Fire Control Technician
V22A - AN/SPS-48E Search Radar Technician
V25A - Rolling Airframe Missile (RAM) MK-31 Guided Missile Weapons Systems Technician
V26A - Gun Computer System (GCS) MK 160 MOD 9/10 Fire Control Technician
V27A - NATO Sea Sparrow Surface Missile System MK-57 MOD 2, 3 Technician
V29A - Improved Point Defense Target Acquisition System MK-23 (IPD/TAS)
V30A - AN/SYQ-27 Naval Fire Control System (NFCS) Phase I Fire Control Technician
V31A - NATO Sea Sparrow Surface Missile System (NSSMS) MK 57 Mods 10 and Above
V32A - Improved Self Defense Surface Missile System Technician
V33A - Ship Self Defense System (SSDS) MK1 Maintenance Technician
V34A - Ship Self Defense System (SSDS) MK1 Systems Technician
V35A - HARPOON (AN/SWG-1A) Maintenance Technician
V38A - AGFCS MK 86 MOD 9 Systems Technician
V40A - AN/SPQ-9B Radar Technician
V41A - Tomahawk Strike Manager (TSM)
V15B - SSDS OA Maintenance Technician
V86B - SSDS Open Architecture (OA) Tech Refresh Maintenance MOD 1C/3C/5C/6C Technician
V16B - Shipboard Tactical Data Systems Technician
V17B - AN/UYQ-21 Computer Display System Maintenance Technician
V18B - SSDS MK-2 Maintenance Technician
V21B - LHD 1 Class ITAWDS Computer/ Peripheral Subsystem Maintenance Technician
V39B - MK-15 MODS 31-33 SeaRAM CIWS Technician

Consideration for advancement:

E7 Selection Board. Highly competitive candidates for selection as a Chief Petty Officer have met many or all of the following milestones:

- Warfare qualified (Based on billet and opportunity)
- FCPO involvement
- Unit LPO or DLPO
- Command collateral (e.g., CFL, Unit CCC, etc.)

E8 Selection Board. Highly competitive candidates for selection as a Chief Petty Officer have met many or all of the following milestones:

- Warfare qualified (Based on billet and opportunity)
- CPOA involvement
- Sailor 360/CPO Initiation committee lead
- Unit LCPO or DLCPO of large command
- CSEL Billet

E9 Selection Board. Highly competitive candidates for selection as a Chief Petty Officer have met many or all of the following milestones:

- Warfare qualified (Based on billet and opportunity)
- CPOA involvement
- Sailor 360/ CPO Initiation committee lead
- Unit LCPO or DLCPO of large command
- CSEL Billet
- Graduate of Senior Enlisted Academy or other Service Equivalent

Acronyms:



FC CAREER PATH
SELECTED RESERVE (SELRES)



CSSE -Combat Systems Senior Enlisted
CCSG - Commander Carrier Strike Group
ATFP - Anti-Terrorism/Force Protection
WCS - Work Center Supervisor
CSTT - Combat Systems Training Team
VBSS - Visit Board Search and Seizure
FPTT - Force Protection Training Team
SCAT - Small Craft Action Team
ATTT - Anti Terrorism Training Team
RDC - Recruit Division Commander
CSC - Combat System Coordinator
SUWC - Surface Weapons Coordinator
ITT - Integrated Training Team
CSCS - Center for Surface Combat Systems
AOIC - Assistant Officer in Charge
CSOOW - Combat System Officer of the Watch
CSMC - Combat System Maintenance Central
ECO - Engagement Control Officer
ATG - Afloat Training Group
LAC - Launch Area Coordinator
ATS - Afloat Training Specialist
MTS - Master Training Specialist
RINC - Recruiter In-Charge



OARS

OCCUPATIONAL ADVANCEMENT REQUIREMENT STANDARDS

Fire Controlman Occupational Advancement Requirement Standards (OARS) to E4 NAVEDTRA 44043

NAME: _____

These Occupational Advancement Requirement Standards (OARS) may be used to validate minimum competencies for performing various rating-specific tasks in paygrade E4 in this rating. OARS is based on the Personnel Advancement Requirements (PARS) that were in place prior to 2000 and encompass the Occupational Standards (OCCSTDs) for the rating/paygrade. An E4 should possess the minimum competencies that were initially assessed in their promotion from E3 to E4 (e.g. A-School promotion, Meritorious Advancement Program, etc...).

Generally, each OARS task area encompasses one or more occupational standards on the same or similar subjects and is written in on-the-job rating language. Completion indicates the candidate can perform the tasks. If circumstances exist that limits a Sailor's ability to effectively demonstrate any OARS task element due to equipment configuration, mission, or operational status, a command may deem a physical demonstration portion not mandatory. However, commanding officers (CO) must be satisfied that the individual possesses the necessary knowledge, skills, and abilities (KSAs) and can properly demonstrate any OARS task at the E4 paygrade, at the current command or other future commands before final signature.

OARS is not designed to replace other qualification programs such as Personnel Qualification Standards (PQS). OARS items that duplicate "sign off" items in these types of programs can be signed off if they have already been signed off under any of these types of programs. OARS is noncompetitive and no relative or absolute mark is assigned.

AIR WARFARE (AW) OPERATIONS

Task Objective	** Supv Init	Date
Analyze air contacts		
Analyze Air Defense (AD) intelligence data		
Assign symbology to air contacts		
Conduct shipboard defense against airborne threats		
Engage air targets with anti-air weapons		
Evaluate air contact information		
Input Air Defense (AD) fire control parameters		
Recommend air contact classifications		
Recommend Air Defense (AD) engagement tactics		
Report air contacts		
Report air engagement Battle Damage Assessments (BDA)		
Track air contacts		
Update air contact information		

** Supv Init may be LPO or E5 or above designee

DIVISION LEADING CHIEF (OR DESIGNEE) SIGNATURE:

PENALTY STATEMENT

Any person who, with intent to deceive, signs any false record, return, regulation, order, or other official document, knowing it to be false, or makes any other false official statement knowing it to be false, shall be punished as a court-martial may direct.

(Aug. 10, 1956, ch. 1041, 70A Stat. 71; Pub. L. 114-328, div. E, title LX, § 5419, Dec. 23, 2016, 130 Stat. 2946.)

AUXILIARY AND SUPPORT SYSTEMS

Task Objective	** Supv Init	Date
Configure auxiliary air and cooling water systems		
Configure power conversion and distribution systems		
Repair auxiliary air and cooling water systems		
Repair power conversion and distribution systems		
Test auxiliary air and cooling water systems		
Test power conversion and distribution systems		
Troubleshoot auxiliary air and cooling water systems		
Troubleshoot power conversion and distribution systems		

** Supv Init may be LPO or E5 or above designee

DIVISION LEADING CHIEF (OR DESIGNEE) SIGNATURE:

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CREW-SERVED WEAPONS, SMALL ARMS, AND SECURITY

Task Objective	** Supv Init	Date
Engage targets with crew-served weapons		
Inventory crew-served weapons		
Inventory small arms		
Mount crew-served weapons		
Test crew-served weapons		
Test small arms		

** Supv Init may be LPO or E5 or above designee

DIVISION LEADING CHIEF (OR DESIGNEE) SIGNATURE:

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EQUIPMENT ADMINISTRATION

Task Objective	** Supv Init	Date
Collect equipment and system status data		
Conduct equipment validations		
Document equipment status		
Inspect work areas, tools, and equipment		
Inventory controlled equipment		
Inventory fire control system software and firmware		
Inventory fire control test equipment		
Provide equipment installation and alteration assistance		
Provide fire control system software and firmware update assistance		

** Supv Init may be LPO or E5 or above designee

DIVISION LEADING CHIEF (OR DESIGNEE) SIGNATURE:

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FIRE CONTROL SYSTEMS

Task Objective	** Supv Init	Date
Conduct Emergency Action Plans (EAP) and Emergency Destruction Plans (EDP)		
Configure alarm, safety, and warning systems		
Configure computer and peripheral systems		
Configure gun weapons systems		
Configure informational display systems		
Configure missile delivery systems		
Configure network systems		
Configure radar systems		
Configure Tactical Display Systems (TDS)		
Configure weapons systems optics		
Repair alarm, safety, and warning systems		
Repair computer and peripheral systems		
Repair gun weapons systems		
Repair informational display systems		
Repair missile delivery systems		
Repair network systems		
Repair radar systems		
Repair Tactical Display Systems (TDS)		
Repair weapons systems optics		
Test alarm, safety, and warning systems		
Test computer and peripheral systems		
Test gun weapons systems		
Test informational display systems		
Test missile delivery systems		
Test network systems		
Test radar systems		
Test Tactical Display Systems (TDS)		
Test weapons systems optics		
Troubleshoot alarm, safety, and warning systems		
Troubleshoot computer and peripheral systems		
Troubleshoot gun weapons systems		
Troubleshoot informational display systems		
Troubleshoot missile delivery systems		
Troubleshoot network systems		
Troubleshoot radar systems		
Troubleshoot Tactical Display Systems (TDS)		
Troubleshoot weapons systems optics		

** Supv Init may be LPO or E5 or above designee

DIVISION LEADING CHIEF (OR DESIGNEE) SIGNATURE:

PENALTY STATEMENT

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(Aug. 10, 1956, ch. 1041, 70A Stat. 71; Pub. L. 114-328, div. E, title LX, § 5419, Dec. 23, 2016, 130 Stat. 2946.)

ORDNANCE EVOLUTIONS AND MAGAZINE SYSTEMS

Task Objective	** Supv Init	Date
Download gun weapons systems		
Inspect ordnance		
Inspect ordnance containers		
Inspect ordnance magazines and lockers		
Inventory ordnance		
Load missile delivery systems		
Perform Material Handling Equipment (MHE) operations		
Perform Ordnance Handling Equipment (OHE) operations		
Perform weapons casualty procedures		
Perform weapons hoist operations		
Prepare ordnance for transporting		
Stow naval ordnance		
Test Material Handling Equipment (MHE)		
Test Ordnance Handling Equipment (OHE)		
Transport naval ordnance		
Unload missile delivery systems		
Unpack naval ordnance		
Upload gun weapons systems		

** Supv Init may be LPO or E5 or above designee

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SURFACE WARFARE (SUW) OPERATIONS

Task Objective	** Supv Init	Date
Analyze surface contacts		
Conduct shipboard defense against surface threats		
Correlate Surface Warfare (SUW) targeting data		
Engage surface targets with anti-surface weapon systems		
Evaluate surface contact information		
Input Surface Warfare (SUW) fire control parameters		
Recommend surface contact classifications		
Recommend Surface Warfare (SUW) engagement tactics		
Report surface contacts		
Report surface engagement Battle Damage Assessments (BDA)		
Track surface contacts		
Update surface contact information		

** Supv Init may be LPO or E5 or above designee

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TECHNICAL CORE FUNDAMENTALS

Task Objective	** Supv Init	Date
Analyze schematics (e.g., ship's drawings and blueprints, mechanical drawings, electronic schematics, piping and valve drawings, etc.)		
Analyze technical manuals		
Configure combat systems equipment		
Control Electromagnetic Interference (EMI) and Radio Frequency Interference (RFI) effects on electronic systems		
Perform basic soldering on electrical and electronic equipment		
Perform Combat Systems Operational Sequencing System (CSOSS) procedures (e.g., casualty responses/operations, normal operations, energize/de-energize equipment, etc.)		
Perform corrosion prevention and control procedures on fire control systems		
Repair Alternating Current (AC) circuits		
Repair digital circuits		
Repair Direct Current (DC) circuits		
Repair electromechanical (synchro/servo) systems		
Repair interconnecting cables and connectors		
Repair Radio Frequency (RF) circuits		
Repair valves		
Replace Alternating Current and Direct Current (AC/DC) motors		
Replace power supplies		
Test Alternating Current (AC) circuits		
Test Alternating Current and Direct Current (AC/DC) motors		
Test communication systems		
Test digital circuits		
Test Direct Current (DC) circuits		
Test electromechanical (synchro/servo) systems		
Test fiber optic cables and connectors		
Test interconnecting cables and connectors		
Test power supplies		
Test Radio Frequency (RF) circuits		
Test valves		
Troubleshoot Alternating Current (AC) circuits		
Troubleshoot Alternating Current and Direct Current (AC/DC) motors		
Troubleshoot digital circuits		
Troubleshoot Direct Current (DC) circuits		
Troubleshoot electromechanical (synchro/servo) systems		
Troubleshoot interconnecting cables and connectors		
Troubleshoot power supplies		
Troubleshoot Radio Frequency (RF) circuits		
Troubleshoot valves		

** Supv Init may be LPO or E5 or above designee

DIVISION LEADING CHIEF (OR DESIGNEE) SIGNATURE:

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(Aug. 10, 1956, ch. 1041, 70A Stat. 71; Pub. L. 114-328, div. E, title LX, § 5419, Dec. 23, 2016, 130 Stat. 2946.)

WATCH TEAM OPERATIONS

Task Objective	** Supv Init	Date
Analyze combat systems equipment status		
Analyze tactical operations data		
Analyze threat weapons data		
Configure Combat Information Center (CIC)/Combat Direction Center (CDC) systems for special evolutions		
Configure systems to Commanding Officer's (CO) battle orders		
Execute Combat Information Center (CIC)/Combat Direction Center (CDC) doctrines		
Report assignment and engagement status of own ships weapons systems		
Set Emission Control (EMCON) conditions		
Set Hazards of Electromagnetic Radiation to Ordnance (HERO), Hazards of Electromagnetic Radiation to Personnel (HERP), and Hazards of Electromagnetic Radiation to Fuel (HERF) conditions		
Transition own ships weapons systems between conditions of readiness		

** Supv Init may be LPO or E5 or above designee

DIVISION LEADING CHIEF (OR DESIGNEE) SIGNATURE:

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COMMAND ENDORSEMENT

Command signatures signify the meeting of the minimum competencies for those in paygrade E-4 in this rating.
Signature level at discretion of command.

DIVISION OFFICER:

DEPARTMENT LCPO:

DEPARTMENT HEAD:

COMMAND CAREER COUNSELOR:

COMMAND MASTER CHIEF:

COMMANDING OFFICER:

PENALTY STATEMENT

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Command Comments – Command Use Only:

Enlisted Community Manager Comments:

Once an individual Sailor's Occupational Advancement Requirement Standards (OARS) have been completed and endorsed by the local Command, documentation of completed OARS by the Command Pay and Personnel Administrator (CPPA), Training Officer, or other authorized command representative will be via Navy Standard Integrated Personnel System (NSIPS) within the Personnel Qualifications section, or Advanced Skills Management (ASM) within the Qual/Cert Records tab. Entries will generate an Enlisted Service Record (ESR) and Electronic Training Jacket (ETJ) entry. These entries provide Sailors with electronic documentation of OARS completion as well as Command and Navy Advancement stakeholders ability to monitor the execution of OARS.



Fire Controlman Seaman Recruit to Seaman

NAME: _____

SKILL TRAINING

(Schools, courses and assignments directly related to occupation)

REQUIRED SKILL TRAINING

Course Title	Course Location	CIN/CSE ID	Course Length	Date Completed
Fire Controlman Combined 'A' School (Block 0) (V021) ¹	Great Lakes, IL	A-100-0093	145 days	

1 - Reserve opportunities may exist, contact Reserve Forces Code N7 for authorization.

RECOMMENDED SKILL TRAINING

Course Title	Course Location	CIN/CSE/ACE ID	Course Length	Date Completed
None				

NAVY ENLISTED CLASSIFICATION CODE (NEC) OPPORTUNITIES

Course Title	Course Location	CIN/CSE/ACE ID	Course Length	Date Completed
V27A - NATO Sea Sparrow Maintenance ¹	Dam Neck, VA	A-104-0204	208 days	
V22A - AN/SPS-48E Operation and Maintenance ¹	Dam Neck, VA	A-104-0206	142 days	
V38A - MK 86 Gun Fire Control System MOD-9 ¹	Dam Neck, VA	A-113-0065	124 days	
1102 - FCS MK-92 Maintenance ¹	San Diego, CA	A-113-0080	157 days	
V19A - MK 15 CIWS MODS 11-14, 21, 22, 25-28 ¹	San Diego, CA/ Dam Neck, VA	A-113-0043	193 days	
V17A - Gun Computer System MK-160 MOD 4/6 & Optical Sight System (OSS) MK 46 MOD 0 Operation and Maintenance ¹	Virginia Beach, VA	A-113-0131	82 days	
V10A - MK-31 Guided Missile Weapon System (GMWS) Rolling Airframe Missile (RAM) MOD 1/3 Operation and Maintenance ¹	Virginia Beach, VA	A-113-0046	54 days	
V20A - Tactical Tomahawk Weapons Control System (TTWCS) Operations and Maintenance ¹	San Diego, CA; Virginia Beach, VA	A-121-0015	89 days	
V21B - LHD Computer/Peripheral ¹	Dam Neck, VA	A-150-0271	46 days	
V35A - Harpoon Weapons System Maintenance ¹	San Diego, CA; Virginia Beach, VA	J-113-1000	54 days	
V40A - AN/SPQ-9B Fire Control Radar Maintenance	Damneck, VA	A-113-0162	40 days	
V39A - Cooperative Engagement Transmission Procession Set (CETPS) AN/USG-2 Maintenance ¹	Dahlgren, VA	S-150-1001	32 days	
1325+ - Cooperative Engagement Transmission Procession Set (CETPS) AN/USG-2A Maintenance ¹	Dahlgren, VA	S-150-9000	11 days Follow-on to S-150-1001	
V51A - Cooperative Engagement Transmission Procession Set (CETPS) AN/USG-2B Maintenance ¹	Dahlgren, VA	A-150-9010	43 days	

1 - Reserve opportunities may exist, contact Reserve Forces Code N7 for authorization.

JOB DESCRIPTION

Support command and Navy mission by employing knowledge, skills, and abilities obtained during formal and on-the-job training events to perform corrective and preventive maintenance on systems assigned and tasks directed by the chain of command and those appointed over you.

RECOMMENDED BILLET ASSIGNMENTS

Maintenance technician afloat

PERSONAL AND PROFESSIONAL DEVELOPMENT
(Completed at reporting 60 day Career Development Board)

Command Address	<input type="text"/>	QD Phone Number:	<input type="text"/>
Mobilization UIC:	<input type="text"/>		
Naval Reserve Activity:	<input type="text"/>		
Division Officer:	<input type="text"/>	Phone Number:	<input type="text"/>
Leading Chief Petty Officer:	<input type="text"/>	Phone Number:	<input type="text"/>
Leading Petty Officer:	<input type="text"/>	Phone Number:	<input type="text"/>
Sponsor/Mentor:	<input type="text"/>	Phone Number:	<input type="text"/>
Depart/Division Career Counselor:	<input type="text"/>	Phone Number:	<input type="text"/>
Date of Initial Entry to Military Service (DIEMS): <input type="text"/>		Date of Initial Entry Reserve Forces (DIERF): <input type="text"/>	
Pay Entry Base Date (PEBD): <input type="text"/>			
ADSD: <input type="text"/>	Report Date: <input type="text"/>	EAOS/EOS: <input type="text"/>	PRD: <input type="text"/> SEA / SHORE: <input type="text"/> / <input type="text"/>
PAYGRADE E1/E2 (9 months time in service required for advancement to E2 and E3)			
PAYGRADE E3 (6 months time in service required to be eligible for advancement to E4)			
Date Advanced: <input type="text"/>	Eligible Advancement Date: <input type="text"/>	Number of times up: <input type="text"/>	
HYT Date: <input type="text"/>	Security Clearance Level: <input type="text"/>	Date Last updated: <input type="text"/>	
Command INDOC complete: <input type="text"/>			

CAREER DEVELOPMENT BOARDS:

Use OPNAVINST 1040.11(ser) & Career Counselor Handbook NAVPERS 15878

Reason for Convening/Discussion Items: (Upon completion update (CIMS) Career Information Management System)

Reporting (within 60 days for active duty or four drill weekends for SELRES) (Date Conducted):

Professional Apprenticeship Career Track (PACT) only:

6 Month: 12 Month: 18 Month:

24 Month: 48 Month: 60 Month:

Family Care Plan: Mil to Mil:

Sailor 360: Special Program: Member Request:

HYT 24 months (Date): HYT Waiver Date: ☐ Approve ☐ Disapprove

C-WAY-REEN 18 months to EAOS/EOS: Career Waypoint not approved:

Rating Conversion: Navy Formal Training Schools Request ("A"/"C"etc):

Transfer: Separation: Career Status Bonus (election message received):

Physical Fitness Test Failure: Overseas Tour Extension Incentives Program (OTEIP):

Advancement Center: Visit MNP Advancement & Promotion page located under the Career & Life Events Tab
(Items to collect/discuss: Bibliography for Advancement, Enlisted Advancement Exam Strategy Guide, Profile Sheets)

Advancement:

Enlisted to Officer Commissioning Program Application & Administration Manual OPNAVINST 1420.1(series):

Commissioning Programs Applications: (prior to submission, command endorsement):

Seaman to Admiral 21 (STA-21): Medical Enlisted Commissioning Program (MECP):

Naval Academy: Naval Academy Preparatory School (NAPS):

Officer Candidate School:

QUALIFICATIONS

Sea/Shore General Qualifications Watch Standing Qualifications	Report Date	Completion Date (N/A if not required)
Ship Board Fire Fighting		
Basic Damage Control		
Advanced Damage Control		
Messenger of the Watch (MOOW)		
Petty Officer of the Watch (POOW)		
Sentry		
Small Weapon Qualification (9mm, Rifle, Shotgun)		
3M 301 Maintenance Person		
3M 302 Repair Parts/Supply Petty Officer (RPPO)		
CSOSS 301 Technician		

Mandatory warfare qualification for enlisted Sailors assigned to designated warfare qualifying commands:

Warfare qualification programs	Report Date	Completion Date (N/A if not required)
Surface Warfare Specialist		

Rate Specific/Department Qualifications (Add)	Report Date	Completion Date (N/A if not required)
Various Reaction Force Watches		
Security Alert Team		
Backup Alert Force		
Ordnance Handling Team Member		
Explosive Handling Qual/Cert Program (As Required)		

Notes on Qualifications:

CREDENTIALING

Navy Credentialing Opportunities On-Line (Navy COOL): Navy COOL assists Sailors (active & reserve) by funding the certification & licensing exams that map their Navy education, training, experience, and competencies to industry/civilian-recognized credentials and occupational equivalents. Sailors may obtain funding for credential examinations, renewals, maintenance fees, and other mandatory examination administrative fees.

The following certifications and licenses are applicable to the FC-Fire Controlman rating. *They may require additional education, training or experience.*

For more information about these credentials, visit NAVY COOL at <https://www.cool.osd.mil/usn/>.

Target Paygrade	Certifying Agency	Credential Title	Date Completed
E4	Certifying Technical Employee Competence (CertTEC)	Basic Electricity and Electronics - Alternating Current (BEE-AC)	
E4	Certifying Technical Employee Competence (CertTEC)	Basic Electricity and Electronics - Analog (BEE-A)	
E4	Certifying Technical Employee Competence (CertTEC)	Basic Electricity and Electronics - Digital (BEE-D)	
E4	Certifying Technical Employee Competence (CertTEC)	Basic Electricity and Electronics - Direct Current (BEE-DC)	
E6	Electronics Technicians Association, International (ETA-I)	Associate Electronics Technician (CETa)	
E5	Electronics Technicians Association, International (ETA-I)	Computer Service Technician (CST)	
E5	Electronics Technicians Association, International (ETA-I)	Electronics Associate AC (EM2)	
E5	Electronics Technicians Association, International (ETA-I)	Electronics Associate Analog (EM3)	
E5	Electronics Technicians Association, International (ETA-I)	Electronics Associate Comprehensive (EM5)	
E5	Electronics Technicians Association, International (ETA-I)	Electronics Associate DC (EM1)	
E5	Electronics Technicians Association, International (ETA-I)	Electronics Associate Digital (EM4)	
E5	Electronics Technicians Association, International (ETA-I)	Fiber Optics Installer (FOI)	
E5	Electronics Technicians Association, International (ETA-I)	Fiber Optics Technician (FOT)	
E5	Electronics Technicians Association, International (ETA-I)	General Communications Technician - Level 1 (GCT1)	
E6	Electronics Technicians Association, International (ETA-I)	Network Computer Technician (NCT)	
E6	Electronics Technicians Association, International (ETA-I)	Network Systems Technician (NST)	
E6	Electronics Technicians Association, International (ETA-I)	RADAR Electronics Technician (RAD)	
E6	Electronics Technicians Association, International (ETA-I)	Telecommunications Electronics Technician (TCM)	
E6	Electronics Technicians Association, International (ETA-I)	Termination and Testing Technician (TTT)	
	InterNational Electrical Testing Association (NETA)	ETT Certified Assistant Level 2	
	InterNational Electrical Testing Association (NETA)	ETT Certified Senior Technician Level 4	
	InterNational Electrical Testing Association (NETA)	ETT Certified Technician Level 3	

Target Paygrade	Certifying Agency	Credential Title	Date Completed
E4	Transportation Security Administration (TSA)	Transportation Worker Identification Credential (TWIC)	

Out of Rate Certifications and Licensure

Academic Degrees – You are now eligible for credentials towards an earned academic degree.

Cross-Rated Sailors – If you have cross-rated, you now are eligible for credentials related to your prior rating.

Off-Duty or Command-Sponsored Training – You are now eligible for credentials for documented training that fully prepares you for a credential.

Navy Reservists – You may now be eligible for funding of credentials related to your civilian occupation.

Prior Other-Service Enlisted Occupation - If you are Navy enlisted (Active or Reserve), you may now be eligible for funding for credentials related to prior other-Service (Army, Air Force, Marine Corps, Coast Guard) enlisted occupation.

Collateral Duty/Out of Rate Assignments - Credentials are also available in these collateral duties/out of rate assignments in which you are serving in or have served in.

Credentials Earned & Maintained Prior to Joining the Navy - If you are Navy enlisted (Active or Reserve), you may now be eligible for funding for credentials that were earned, and maintained, prior to your enlistment in the Navy. The certification or license must have relevance to the needs of the Navy, and must appear on Navy COOL, although it does not need to show the Navy Bucks icon to be funded.

* See the *Additional Funding Opportunities* section on any rating page on Navy COOL for further details.

United Services Military Apprenticeship Program (USMAP): USMAP is available to most active duty occupations and is certified by the U.S. Department of Labor. This is the largest apprenticeship program operating in the U.S. and is recognized by all 50 states. Completion of one of these programs would qualify you as a journeyman, which could mean a significantly higher starting salary in the civilian work force. Most programs require 5-8 years to complete but are transferable if you decide to leave the service prior to completion. USMAP opportunities also exist for SELRES with orders over 12 months.

The following USMAP apprenticeships are applicable to the FC-Fire Controlman rating.

For more information about these apprenticeships, visit USMAP at <https://usmap.netc.navy.mil/>.

Rank	Apprenticeship	Date Completed
E1 - E9	Computer Operator	
	Counselor (Professional & Kindred)	
	Electronics Technician	
	Industrial Maintenance Mechanic	
	Internetworking Technician	
E1 - E9	Optical-Instrument Assembler (Optical Goods)	

POST MILITARY OCCUPATIONS

The following post military occupations are similar to the FC-Fire Controlman Rating. For more information about these occupations, visit NAVY COOL at <https://www.cool.osd.mil/usn/>.

Occupation (Civilian Employer)
Assemblers and Fabricators, All Other
Career/Technical Education Teachers, Postsecondary
Computer Hardware Engineers
Computer Systems Analysts
Computer, Automated Teller, and Office Machine Repairers
Data Entry Keyers
Electrical and Electronic Engineering Technologists and Technicians
Electrical and Electronics Repairers, Commercial and Industrial Equipment
Electro-Mechanical and Mechatronics Technologists and Technicians
Equal Opportunity Representatives and Officers
Explosives Workers, Ordnance Handling Experts, and Blasters
First-Line Supervisors of Mechanics, Installers, and Repairers
Helpers--Installation, Maintenance, and Repair Workers
Helpers--Pipelayers, Plumbers, Pipefitters, and Steamfitters
Industrial Machinery Mechanics
Labor Relations Specialists
Photonics Engineers
Photonics Technicians
Plumbers, Pipefitters, and Steamfitters
Radio, Cellular, and Tower Equipment Installers and Repairers
Software Developers
Telecommunications Equipment Installers and Repairers, Except Line Installers
Training and Development Managers

Occupation (Federal Employer)
0804 - Fire Protection Engineering Series
0855 - Electronics Engineering Series
0856 - Electronics Technical Series
1550 - Computer Science Series
2608 - Electronic Digital Computer Mechanic
2610 - Electronic Integrated Systems Mechanic
9944 - Electronics Technician

STAY NAVY

AC to AC and FTS to FTS - Continue Navy career on Active Duty.

E6 and below with less than 14 years of service will require a C-Way Application to be approved for reenlistment or extension.

Once C-Way application is approved, the Sailor should request to Reenlist or Extend with the appropriate form.

REENLIST / EXTEND: Request Chit/Form:

Career Waypoints-Reenlistment Approval:

School as a Reenlistment Incentive:

Prior Service Reenlistment Eligibility - Reserve (PRISE-R):

MyNavy Assignments (MNA):

Medical/Dental Screening:

Command Recommendation (evaluation): Bonus: Ceremony:

RC to AC/FTS

See MILPERSMAN 1306-1505: Sailors may complete a component change from the Reserve Component (RC) to AC (RC2AC/FTS). This not only leverages existing skill sets that reside in the RC population to improve and maintain AC community health, but also provides qualified Sailors with an opportunity to resume or begin a career in the AC/FTS. This component change refers to a permanent transfer from RC2AC/FTS. This voluntary program enables qualified, eligible enlisted RC Sailors to submit applications in Career Waypoints (C-WAY) based on available quotas published on the Bureau of Naval Personnel (BUPERS), Enlisted Community Manager (BUPERS-32) Web page at: <https://www.public.navy.mil/bupers-npc/enlisted/community/selres/Pages/EnlistedReserveOpportunities.aspx>.

If you have any questions or concerns, contact your unit or NOSC career counselor.

RC to RC - Continue your Navy career as a Reservist.

Submit reenlistment request utilizing NAVRES 1160/1 Drilling Reservist Reenlistment Worksheet.

REENLIST / EXTEND: Request Chit/Form:

School as a Reenlistment Incentive:

MyNavy Assignments (MNA):

Medical/Dental Screening:

Command Recommendation (evaluation): Bonus: Ceremony:

AC/FTS to CIP

The Career Intermission Program allows Officers and Enlisted Sailors to transfer out of the active component (AC/FTS) and into the Individual Ready Reserve for a period of one to three years to pursue personal or professional obligations outside the Navy, while providing a means for their seamless return to active duty.

For additional information, go to: <https://www.public.navy.mil/bupers-npc/career/reservepersonnelmgmt/IRR/Pages/CIP.aspx>.

AC/FTS to Secretary of the Navy Tours with Industry

This program provides a venue for exceptional Sailors to experience innovative business practices. Navy fellows are fully immersed in company practices and will be actively engaged in projects and company operations. Past fellows were assigned to companies including VMware, Qualcomm, Apple, Inc., Boeing, Tesla, Oak Ridge National Laboratory, GE Digital, Amazon, FedEx, Northrup Grumman, Space X, LinkedIn and USAA.

For additional information go to: <https://www.public.navy.mil/bupers-npc/career/talentmanagement/Pages/SNTWI.aspx>.

Canvasser Recruiter (CANREC)

The Canvasser Recruiter (CANREC) Recall Program is a voluntary and temporary recall program for RC personnel to serve as production recruiters in support of the Navy Prior Service recruiting mission. Personnel eligible to volunteer for a Definite (also termed as "temporary") Recall to Active Duty (ACDU) as a CANREC are Reserve Component (RC) members, specifically Selected Reserve (SELRES), Individual Ready Reserve (IRR-ASP), and Voluntary Training Unit (VTU) personnel.

For additional information, go to:

<https://www.public.navy.mil/bupers-npc/career/reservepersonnelmgmt/definiterecall/Pages/CANRECRecall.aspx>.

Career Waypoints-Reenlistment:

The Command Career Counselor is your local advocate to assist you with the Career Waypoints application process.

- E3-E6 Sailors with less than 14 years of service must submit a Career Waypoints application, regardless of reenlistment intentions. Sailors who do not desire to reenlist will submit an "intends to separate" application. Sailors not eligible for reenlistment will submit a "not eligible" application.
- The Career Waypoints system automatically generates most of the applications needed by Sailors. Applications must be submitted no later than 16 months prior to expiration of active/reserve obligated service (EAOS/EOS) or as extended (SEAOS/SEOS). Sailors with less than 24 months of contract time remaining at their projected rotation date (PRD) will submit an application 15 months prior to their PRD. In either case, the Career Waypoints system will automatically generate

applications for Sailors 18 months prior to either timeframe. Applications required outside of the established C-Way gates can be submitted as Special Circumstance applications. Examples of when these may be needed include OBLISERVE for special duty, decommissioning or homeport shift.

- The C-Way 3-2-1 Process aligns career decisions with the detailing process. Soft End of Active/Reserve Obligated Service (SEAOs/SEOS)/End of Active/Reserve Obligated Service (EAOS/EOS) applications are created by C-Way at the 18 month from S/EAOS/EOS mark and must be submitted by the Command Career Counselor at the 16 month mark. This provides time for the Career Counselor to validate the Sailor's information and to ascertain the Sailors career intentions. The first C-Way review gate occurs from 16 to 13 months from S/EAOS/EOS with career choice options of in-rate, conversion, and Selected Reserve. The second review gate occurs from 12 to 9 months from S/EAOS/EOS with career choice options of conversion and Selected Reserve. From 8 months to 4 months to S/EAOS/EOS the Sailor can only choose Selected Reserve affiliation.
- Monthly reenlistment quotas are limited and must be reserved for our best and brightest Sailors who desire to Stay Navy. Sailors must choose one of the following based on their desires and qualifications:
 - Reenlist-in-Rate,
 - Reenlist-in-rate, Willing to Convert
 - Convert only
 - AC to AC or FTS to FTS
 - RC to AC/FTS
 - RC to RC
 - AC/FTS to CIP (Intermission)
 - AC/FTS to Tour w/ Industry
 - SELRES option
 - Canvasser Recruiter
 - Intend to separate
 - Not eligible

In February 2014, C-Way delivered auto-approval capabilities to provide reenlistment decisions on S/EAOS/EOS applications more quickly for eligible ratings. This changed the monthly processing of reenlistment applications as described below.

- If you are in an, "open" rating or a "balanced" rating in an undermanned year group or an E6, you are eligible for reenlistment, and your application is submitted with correct data it will be auto-approved and returned immediately, and you can reenlist.
- If you are in a "competitive" rating or a balanced rating but not an undermanned year group, then your application will be processed through the monthly Rack and Stack process. Applications submitted in one month are processed in Rack and Stack the following month.
- For Nuclear ratings, all applications are reviewed by enlisted community managers on an ongoing basis throughout the processing month.
- If required data is missing (evaluations, Physical Fitness Assessment (PFA) data, security clearance etc.) the application will be denied with a note to your career counselor regarding what needs to be fixed. It is critical the Command Career Counselor reviews these notes to ensure Sailors are not disadvantaged in their opportunities for retention.
- Upon completion of the monthly process, Career Waypoints results will be available to command users via the Monthly report section of the Career Waypoint system.
- For additional guidance, see MILPERSMAN 1160-140, NAVADMIN 231/17, and your Career Counselor
Or call My Navy Call Center: (833) 330-MNCC or (901) 874-MNCC; or askmncc@navy.mil

Targeted Reentry Program (TRP)

NAVADMIN 047/18 empowers COs with the ability to identify and recommend SELRES on active duty/Definite Recall (ACDU) and Full Time Support (FTS) enlisted personnel, who are the best and brightest, the option for expedited reentry to Active Duty in the Navy.

- *Golden Ticket* – Sailors are guaranteed an expedited return to ACDU within one year from separation from ACDU. Sailors who do not use their Golden Ticket within one year are automatically convert to a Silver Ticket for one additional year. Sailors must remain fully qualified.
- *Silver Ticket* – Sailors are afforded an expedited return to ACDU within two years from separation date. This opportunity is subject to Needs of the Navy (NOTN) and provided the Sailor remains fully qualified.

Upon completion of the monthly process, Career Waypoints results will be available to command users via the Monthly report section of the Career Waypoints system.

For additional guidance, see MILPERSMAN 1001-260, NAVADMIN 231/17, and your Career Counselor
Or call My Navy Call Center: (833) 330-MNCC or (901) 874-MNCC; or askmncc@navy.mil

AC/FTS TRANSFER:

<u>15 Months</u>	<u>12 Months</u>	<u>9 Months</u>	<u>6 Months</u>	<u>Orders Received</u>
Career Waypoint	Career Waypoint	Career Waypoint	Accept Orders	Screening
Exception Family Member	Exception Family Member	Medical/Dental	Reverse Sponsor	Obligate
MNA	MNA	MNA	Relocation (FFSC)	Bonus
Mil to Mil	Eval	SRB	SRB	
Family Care Plan				
Continuous Overseas Tours (COT)				
Overseas Tour Extension Incentive Program (OTEIP)				

SELRES TRANSFER:

<u>12 Months</u>	<u>9 Months</u>	<u>6 Months</u>	<u>3 Months</u>	<u>Orders Received</u>
MNA	MNA	MNA	MNA	Sign Eval
(verify account access)	(extend in current field)	(apply for billets)	(apply for billets)	
Family Care Plan		Start Eval		
Mil to Mil		Reverse Sponsor		
		Incentives/EOS opportunities		

For additional assistance in transfer and relocation, go to the Military OneSource website:
<https://www.militaryonesource.mil/> and visit your Fleet and Family Support Center on base.

SEPARATING/RETIRE*:

<u>18 -12 months</u>	<u>6 months</u>	<u>90 days</u>	<u>30 days</u>
TAP*	MED/DEN	Copy of Records	Copy of Records
Complete DD 2648	Relocation	Official Record CD	PSD
Transition Planning	Relocation Services (FFSC)	Arrange Ceremony	MED/DEN
Annual Statement of Service History (ASOSH)	Reserve Affiliation	Request Leave / PTDY	DD 214*
Reserve Only	VA/DVA		

*Upon demobilization, SELRES will need Transition Assistance Program (TAP) and DD-214; DD-214 is not required for Reserve Retirements.

PHYSICAL FITNESS:

Participate in a year-round physical fitness program to meet Navy fitness and BCA standards. Review and verify accuracy of PFA data in PRIMS within 60 days of the PFA cycle. (PRIMS is accessible through your BUPERS Online Account)

Height Weight If Required (AC BCA)

Last 2 PRT Cycles: Forearm Plank / Push-ups / Run/Swim/Cardio /

Overall Score /

List date (if) any PRT/BCA failure(s) over the last 5 years /

List if any Medical Waiver(s) /

For more information on Navy Fitness, visit: https://www.public.navy.mil/bupers-npc/support/21st_Century_Sailor/physical/Pages/default2.aspx

PROFESSIONAL MILITARY EDUCATION (E1/E2/E3)

(Resident and non-resident coursework designed to enhance a Sailor's general military professional knowledge and abilities)

EDUCATION: (Prior to considering any pursuit of off duty education or program enrollment call the Navy College Virtual Education Center (NCVEC) 877-838-1659 or Visit your overseas Navy College Office.)

Education Plan Completed (Navy College Office/NCVEC)

Current Education Level

Degree Goal

** Various degree options are available in the Advanced Education section. **

Goal: Date: AA/AS BA/BS Master
(Credits to earn a degree - AA/AS: 60 SH/90 QH, BA/BS: 120 SH/180, QH, Master /Doctorate: Variable based on program)

Number of current credits American Council on Education (ACE) recommended credits

Joint Service Transcripts (JST)

HS Transcripts College Transcripts

Date Degree Obtained: AA/AS BA/BS Master Doctorate

For entry into JST, have your College/University send official transcripts to:
Naval Education and Training Command N644
JST Operation Center
6490 Saufley Field Road
Pensacola, FL 32509
Email: JST@DODED.mil

VOLUNTARY EDUCATION: Links to study guides, exam preparations, and practice tests are located on the DANTES website <https://www.dantes.doded.mil/>

Academic skills NCPACE CLEP DSST

TA MGIB MGIB-SR Post 9/11 GIB

E1/E2/E3 REQUIRED NAVY PME:

Course Title	Course Location	CIN/CSE ID	Course Length	Date Completed
Foundational Leader Development Course ⁵	Water front/ Flightline/ Various ⁴	NELD-03	2.5 days	
Navy Military Training (Life Skills) (Pre-A School Delivery only) ⁶	Command Delivered	A-500-1000	2 days	
Professional Military Knowledge Eligibility Exam (PMK-EE) for E4	Navy e-Learning	NETCPDC-PMK-EE-E4-1.0		
Ethics Training	Command Delivered			
Required General Military Training Topics For FY 2021 (Delivery determined by command discretion) ¹				
Sexual Assault Prevention and Response Awareness (SAPR) ³	Command Delivered	CPPD-GMT-SAPRA-1.0		
Cyber Awareness Challenge	MNP	DOD-IAA-V16.0		
Counterintelligence Awareness and Reporting	Command Delivered/ MNP	DOD-CIAR-1.0		
Records Management	Command Delivered/MNP	DOR-RM-010-1.2		
Privacy Act	Command Delivered			
Suicide Prevention ³	Command Delivered	CPPD-GMT-SAP-1.0		
Antiterrorism Level I ²	Command Delivered/ MNP	CENSECFOR-AT-010-1.0		

1 - Verify GMT topics on the My Navy Portal (MNP) GMT webpage

2 - Personnel with less than 3 years of time-in-service must also complete Antiterrorism Level 1 training. For personnel with greater than 3 years of time-in-service, Antiterrorism Level 1 periodicity is now a triennial requirement and will be mandated for all hands in FY-22.

3 - The recommended method of delivery for SAPR and Suicide Prevention annual training is via face-to-face, small group facilitated discussions.

4 - See MNP Enlisted Leadership Development page: <https://www.mnp.navy.mil/group/training-education-qualifications/enlisted-leader-development>.

5 - Available for paygrades E3 and E4

6 - Required for delivery in "A" School for all ratings

E1/E2/E3 REQUIRED COMMUNITY PME:

Course Title	Course Location	CIN/CSE ID	Course Length	Date Completed
None				

E1/E2/E3 RECOMMENDED NAVY PME:

Course Title	Course Location	CIN/CSE ID	Course Length	Date Completed
Basic Military Requirements (NAVEDTRA 14325) (EDITION 1/1/2002)		NAVEDTRA 14325		
Professional Military Knowledge Eligibility Exam (PMK-EE) Study Material	Navy e-Learning	NETCPDC-PMK-EE-SM-1.0		
Military Requirements for Petty Officer Third and Second Class	Navy e-Learning	NRTC-NAVEDTRA-14504-MRFPO-TASC-1.0		
Introductory Enlisted Professional Military Education (IEPME)	Navy e-Learning	Military DON/ PME	18 hrs	
Block 1 Introductory EPME - Introduction	Navy e-Learning	NWC-IEPME-INTRO-B1	-	
Block 2 Introductory EPME - History and Traditions	Navy e-Learning	NWC-IEPME-INTRO-B2	3 hrs	
Block 3 Introductory EPME - Enlisted Professionalism	Navy e-Learning	NWC-IEPME-INTRO-B3	3 hrs	
Block 4 Introductory EPME - Policy and the Navy	Navy e-Learning	NWC-IEPME-INTRO-B4	3 hrs	
Block 5 Introductory EPME - Planning for Operations	Navy e-Learning	NWC-IEPME-INTRO-B5	3 hrs	
Block 6 Introductory EPME - Regional and Cultural Awareness	Navy e-Learning	NWC-IEPME-INTRO-B6	3 hrs	
Block 7 Introductory EPME - Technology in the Maritime Domain	Navy e-Learning	NWC-IEPME-INTRO-B7	3 hrs	
Block 8 Introductory EPME - Conclusion	Navy e-Learning	NWC-IEPME-INTRO-B82	-	
Cultural Awareness	Navy e-Learning	Foreign Language and Culture	45 hrs	
Navy Reserve Fundamentals for Active Duty Course	Navy e-Learning	NAVRESFOR-NRF-3.0	10 hrs	
Nutrition	Navy e-Learning	NMHCI2107V2.1	1 hour	
Personal Financial Management	Navy e-Learning	CPD-PFM-1.0	8 hrs	
PREVENT	Command Delivered	S-501-0150	24 hrs	
Recommended General Military Training Topics For FY 2021 (Delivery determined by command discretion) ¹				
Alcohol, Drug, and Tobacco Awareness	Command Delivered	CPPD-GMT-ADTA-1.0		
Combating Trafficking of Persons General Awareness	Command Delivered/ MNP	DOD-CTIP-3.0		
Domestic Violence Prevention and Reporting	Command Delivered	CPPD-GMT-DV-1.1		
Electromagnetic Maneuver Warfare	Command Delivered/ MNP	NAVIFOR-FEWC-EMW-01.01		
Energy Policy	Command Delivered	OPNAV-GMTE-1.0		
Equal Opportunity, Harassment, and Resolution Options	Command Delivered	CPPD-GMT-EOSH-1.0		
Hazing Policy and Prevention	Command Delivered	CPPD-GMT-HPP-1.0		
Operational Risk Management (ORM)	Command Delivered	CPPD-GMT-ORMTC-1.0		
Operations Security	Command Delivered/ MNP	NOST-USOPSEC-3.0		
Personal Financial Management	Command Delivered	CPPD-GMT-PFM-1.0		
Sexual Health and Responsibility	Command Delivered	CPPD-GMT-SHR-1.0		
Stress Management	Command Delivered	CPPD-GMT-SM-1.0		
Traumatic Brain Injury	Command Delivered			
Privacy Act	Command Delivered	DON-PRIV-2.0		
Antiterrorism Level ²	Command Delivered/ MNP	CENSECFOR-AT-010-1.0		
Tactical Combat Casualty Care All Service Member/Tier 1	Command Delivered	B-300-2010		
Financial Management ³	Command Delivered			

1 - Verify GMT topics on MyNavy Portal GMT webpage

2 - Personnel with less than 3 years of time-in-service must also complete Antiterrorism Level 1 training. For personnel with greater than 3 years of time-in-service, Antiterrorism Level 1 periodicity is now a triennial requirement and will be mandated for all hands in FY-22.

3 - Does not have a mandatory periodicity but is required at career touch points per CNO WASHINGTON DC/191539ZJUL16.

Courses with Recommended Reserve Points:

Commander Navy Reserve Forces (CNRF) N7 determines the number of reserve points awarded for completion of a course taken on Navy e-Learning. This listing should only be used as a guide and is subject to change by direction of CNFR N7.

Navy e-Learning has no control over how many, if any, reserve points are eventually awarded for the completion of a course. All questions concerning the award of reserve points should be directed to CNFR N7.

E1/E2/E3 RECOMMENDED RESERVE PME:

Course Title	Course Location	CIN/CSE ID	Course Length	Date Completed
Navy Reserve Fundamentals Course (E1-E9)	Navy e-Learning	NAVRESFOR-NRF-3.0		
Navy Reserve Order Writing System/Reserve Defense Travel System (E1-E9)	NRPDC New Orleans	R-510-5514	5 days	
Reserve Medical Administration (E1-E7)	NRPDC New Orleans	R-500-0007	5 days	
Reserve Pay and Personnel Management (E1-E9)	NRPDC New Orleans	R-500-0020	5 days	
Non-Prior Service Accession Program	Navy e-Learning	CNRFC-NPSAP-2 /DoN 0	23 hrs	
Guidance for Mobilization	Navy e-Learning	CNRFC-GMB-1.1 /DoN	4 hrs	
Military Sealift Command 101	Navy e-Learning	CNRFC-MS101 /DoN 1.1	24 hrs	

For more details or to check for updates please check CANTRAC or the NRPDC Sharepoint page (CAC required):
https://private.navyreserve.navy.mil/NRPDC/Pages/NRH_Default.aspx

E1/E2/E3 RECOMMENDED COMMUNITY PME:

Course Title	Course Location	CIN/CSE ID	Course Length	Date Completed
NAVEDTRA 14325, Military Requirements, Basic (BMR)				
NAVEDTRA 14504, Military Requirements for Petty Officers Third and Second Class				

NAVY PROFESSIONAL READING PROGRAM (PRP)

The purpose of the Chief of Naval Operations Professional Reading Program (CNO PRP), maintained by CNO PRP program managers at the U.S. Naval War College, is to facilitate the professional and personal development of all Sailors. For additional information on the CNO PRP visit <https://www.navy.mil/CNO-Professional-Reading-Program/>

READINESS

Visit https://www.navy.mil/CNO-Professional-Reading-Program/Readiness/ for more information.		
Foundational	Advanced	Capstone
Ghost Fleet – <i>Singer</i>	Matterhorn - <i>Marlantes</i>	Leaders Eat Last - <i>Sinek</i>
Guide to Maritime Strategy – <i>Holmes</i>	Red Star Over the Pacific - <i>Holmes & Yoshihara</i>	Mindset: Psych of Success - <i>Dweck</i>
Neptune's Inferno - <i>Hornfischer</i>	Seapower: Guide for 21st Century - <i>Till</i>	The Infinite Game - <i>Sinek</i>
Six Frigates – <i>Toll</i>	The Leader's Bookshelf - <i>Stavridis</i>	What is it Like to go to War - <i>Marlantes</i>

CAPABILITIES

Visit https://www.navy.mil/CNO-Professional-Reading-Program/Capabilities/ for more information.		
Foundational	Advanced	Capstone
AI Basics - <i>Taulli</i>	Fifth Domain: Cyber - <i>Clarke</i>	Deep Thinking: AI - <i>Kasparov</i>
Army of None - <i>Scharre</i>	Human Compatible - <i>Russell</i>	Four Global Forces - <i>Dobbs</i>
Burn-In - <i>Singer</i>	New Rules of War - <i>McFate</i>	Genius Weapons - <i>DeMonte</i>
The Future of War - <i>Freedman</i>	The Perfect Weapon - <i>Sanger</i>	Inevitable - <i>Kelly</i>
The Next 100 Years - <i>Friedman</i>		

CAPACITY

Visit https://www.navy.mil/CNO-Professional-Reading-Program/Capacity/ for more information.		
Foundational	Advanced	Capstone
Fearless-SEAL Team Six - <i>Blehm</i>	American Naval Thinking - <i>Haynes</i>	End of Grand Strategy - <i>Dombrowski</i>
One Nation Under Drones - <i>Jackson</i>	Fleet Tactics - <i>Hughes</i>	Our Robots Our Selves - <i>Mindell</i>
The Fleet at Flood Tide - <i>Hornfischer</i>	Just and Un-Just Wars - <i>Walzer</i>	Second Most Powerful Man - <i>O'Brien</i>
Tin Can Sailors - <i>Hornfischer</i>	Seapower - <i>Stavridis</i>	The Future of Violence - <i>Wittes</i>

SAILORS

Visit https://www.navy.mil/CNO-Professional-Reading-Program/Sailors/ for more information.		
Foundational	Advanced	Capstone
Dichotomy of Leadership - <i>Willink</i>	A Tactical Ethic - <i>Couch</i>	Fortune Favors Boldness - <i>Costello</i>
Ego is the Enemy - <i>Holiday</i>	Character Gap - <i>Miller</i>	No Pity - <i>Shapiro</i>
How to be an Anti-Racist - <i>Kendi</i>	Fed Up - <i>Hartley</i>	Road to Character - <i>Brooks</i>
Tiny Habits - <i>Fogg</i>	Military Ethics - <i>Lucas</i>	The Honest Truth about Dishonesty - <i>Aire</i>
We Can't Talk About That at Work - <i>Winters</i>	Sexual Minorities and Politics - <i>Pierceson</i>	The New Jim Crow - <i>Alexander</i>
	Start with Why - <i>Sinek</i>	

MCPON's Suggested Reading

Visit https://www.navy.mil/CNO-Professional-Reading-Program/MCPON-Suggested-Reading/ for more information.		
Master Chief Petty Officer of the Navy (MCPON) Russell Smith identified these 21 additional books as suggested reading.		
A Call to Conscience - <i>Carson, Shepard, Young</i>	Happiness Advantage - <i>Achor</i>	Starship Troopers - <i>Heinlein</i>
Blink: Power of Thinking - <i>Gladwell</i>	Jonathan L. Seagull - <i>Bach</i>	Team of Teams - <i>McChrystal, Collins, Silverman, Fussell</i>
Brave New World - <i>Huxley</i>	Only Women in the Room - <i>Benedict</i>	The Captain Class - <i>Walker</i>
Cannonball! - <i>Yates</i>	Overcome - <i>Redman</i>	The Good Shepherd - <i>Forester</i>
Class 11 - <i>Waters</i>	Perform Under Pressure - <i>Evans</i>	The Old Man's Trail - <i>Campbell</i>
Descent Into Darkness - <i>Raymer</i>	Run Silent, Run Deep - <i>Beach</i>	Tragedy at Honda Point - <i>Lockwood</i>
Duty: A Memoir - <i>Gates</i>	Shoot the Women First - <i>MacDonald</i>	We Die Alone - <i>Howarth</i>

Nearly 200 years ago, the Navy ordered its ships be outfitted with a reading list of 37 books in order to help train and educate Sailors. The Navy's leaders knew then what is still the case today: to outthink our competitors we must study and apply lessons we've learned from our past. Furthermore, it is critically important for our Navy to be a learning organization. And one of the very best ways to do that is to foster an environment where every Sailor deepens their level of understanding and learning.

That is why we launched an updated Chief of Naval Operations Professional Reading Program (CNO-PRP) reading list, with a motto of "Read Well to Lead Well."

E1/E2/E3 RECOMMENDED COMMUNITY READING

Title	Completed
FC Volumes <i>NAVEDTRA Series</i>	
GM Volume 1 <i>NAVEDTRA Series</i>	
Combat Systems Alignment Theory <i>NAVSEA SW225-A0-MMA-010</i>	
Combat Systems Operational Sequencing System (CSOSS) Manuals (Ship Specific)	
AEGIS Capabilities and Limitations (Ship Specific)	
TACMEMOs (Platform/System Specific)	
NEETS, Module 01--Matter, Energy, and Direct Current <i>NAVEDTRA 14173A</i>	
NEETS, Module 02--Alternating Current and Transformers <i>NAVEDTRA 14174A</i>	
NEETS, Module 03--Introduction to Circuit Protection, Control, and Measurement <i>NAVEDTRA 14175A</i>	
NEETS, Module 04--Electrical Conductors, Wiring Techniques and Schematic Reading <i>NAVEDTRA 14176A</i>	
NEETS, Module 05--Generators and Motors <i>NAVEDTRA 14177A</i>	
NEETS, Module 06--Introduction To Electronic Emission, Tubes, And Power Supplies <i>NAVEDTRA 14178</i>	
NEETS, Module 07--Solid-State Devices And Power Supplies <i>NAVEDTRA 14179A</i>	
NEETS, Module 08--Introduction To Amplifiers <i>NAVEDTRA 14180</i>	
NEETS, Module 10--Introduction to Wave Propagation, Transmission Lines, and Antennas <i>NAVEDTRA 14182</i>	
NEETS, Module 12--Modulation Principles <i>NAVEDTRA 14184</i>	
NEETS, Module 09--Introduction To Wave-Generation and Wave-Shaping Circuits <i>NAVEDTRA 14181</i>	
NEETS, Module 11--Microwave Principles <i>NAVEDTRA 14183</i>	
NEETS, Module 13--Number Systems And Logic Circuits <i>NAVEDTRA 14185A</i>	
NEETS, Module 14--Introduction To Microelectronics <i>NAVEDTRA 14186</i>	
NEETS, Module 15--Principles Of Synchros, Servos, And Gyros <i>NAVEDTRA 14187A</i>	
NEETS, Module 16--Test Equipment <i>NAVEDTRA 14188A</i>	
NEETS, Module 17--Radio Frequency Communications Principles <i>NAVEDTRA 14189</i>	
NEETS, Module 18--Radar Principles <i>NAVEDTRA 14190</i>	
NEETS, Module 19--The Technician's Handbook <i>NAVEDTRA 14191</i>	
NEETS, Module 21--Test Methods And Practices <i>NAVEDTRA 14193</i>	
NEETS, Module 22--Digital computers <i>NAVEDTRA 14194A</i>	
NEETS, Module 24--Fiber Optics <i>NAVEDTRA 14196A</i>	
Standard Fire Control Symbols <i>NAVSEA OP 1700</i>	
Clearing Of Live Ammo From Guns <i>NAVSEA SW300-BC-SAF-010</i>	
Rang Table For 5 Inch 54 - Caliber Guns Firing Projectiles Mark 41 and Mark 64 (Surface Targets) <i>NAVSEA SW323-AF-ORD-010 / OP 1182</i>	
Ships' Maintenance and Material Management (3M) Manual <i>NAVSEAINST 4790.8 Series</i>	
TLAM Launch Platform Weapons System And Tactics <i>NTTP 3-03.1 Volume 2</i>	
TLAM Employment Manual <i>NTTP 3-03.1 Volume 1</i>	
Ballistic Wind And Density For Naval Gunfire <i>NAVSEA SW226-AB-MMO-010</i>	
Surface Ship Gunnery <i>NWP 3-20.32</i>	
Magazine Sprinkler Systems <i>NAVSEA S9522-AA-HBK-010</i>	
Basic Liquid Cooling Systems for Shipboard Electronics <i>S9536-B1-MMO-010</i>	
Basic Liquid Cooling Systems for Shipboard Electronics <i>S9536-BD-HBK-010</i>	



ALL PAYGRADES VOLUNTARY EDUCATION



Note: Prior to considering any pursuit of off duty education or program enrollment contact the Navy College Virtual Education Center (NCVEC) or visit your Overseas Navy College Office.

You must complete the Tuition Assistance Training before your first course will be approved.

Complete the online courses at the Navy College Website: <http://www.navycollege.navy.mil/>

How do I get started?

You already have. All your training up to this point is part of your Fire Controlman Roadmap. Now that you have made the first steps you will need to sit down and formulate a plan. This plan will work best if you start out discussing your options with your Leading Chief Petty Officer, Leading Petty Officer, Mentor, or Career Counselor. They will help you understand all of the basics. Then your next step is to contact the Navy College Virtual Education Center or visit your Overseas Navy College Office. Then your counselors will be able to help you formalize your plan and make sure that it makes sense for both you and the Navy. To aid you in your conversation with these professionals, here are a few questions that you may want to ask.

What credits do you have? What non-college courses have you taken? Where do you want to go? What field of study, or what kind of degree? What program will help me get there: Traditional or Online? What are my next steps: Transfer credits, take exams, have experience evaluated, or sign up for new courses?

RECOMMENDED OCCUPATIONAL-RELATED ASSOCIATE'S DEGREE FOR FC

Recommended Associates' degrees for the Seaman
Electronics
Computer Science
Computer Networking
Information Technology

RECOMMENDED OCCUPATIONAL-RELATED BACCALAUREATE/MASTERS DEGREE FOR FC

Recommended Bachelors/Masters degrees for the Seaman
Electronics
Computer Science
Computer Networking
Information Technology
Telecommunications
Engineering or Engineering Technology
Mathematics
Business Administration

GENERAL INFORMATION ON VOLUNTARY EDUCATION

The Navy College Program & Web Page:

The Navy College Program (NCP) provides opportunities to Sailors to earn college degrees by providing academic credit for Navy training, work experience, and off-duty education. The NCP mission is to enable Sailors to obtain a college degree while on active duty. In support of the four R's - Recruiting, Readiness, Retention, and Respect - the NCP signifies Navy's commitment to education by improving enlistment appeal; demonstrating Navy service and achieving a college degree are compatible; helping Sailors apply themselves to new situations and challenges and better preparing them for advancement; building up Sailors' self-image; and producing higher quality Sailors.

- More information is available online at: <https://www.navycollege.navy.mil>

Tuition Assistance (TA):

NAVADMIN 114/19 limit changes as of 1 October 2019: TA provides funds for eligible active-duty personnel to attend approved educational institutions on an off-duty basis to earn a high school diploma, vocational/technical certificate, or college degree. TA pays for tuition. TA will pay for the following amount per career: 120 semester hours, or 180-quarter hours or 1800 clock hours or a combination of semester, quarter and clock hours. TA will pay the following amounts per fiscal year: 12 semester hours, not to exceed \$250/credit for semester hours or 18-quarter hours not-to-exceed \$166.67/credit for quarter hours or, 180 clock hours not-to-exceed \$16.67/clock hours or a combination of semester, quarter and clock hours.

- More information is available online at: <https://www.navycollege.navy.mil>

Joint Service Transcripts (JST)

JSTs are official military transcripts which are used by colleges to validate your actual credited training. Every Sailor has a transcript already and access to it is free.

- More information is available online at: <https://jst.doded.mil/>

The American Council on Education (ACE)

ACE has reviewed every course listed in the OCCUPATIONAL Roadmap and determined what type of collegiate level credit is recommended. The ACE identifier, listed with each course, is a source to validate the information and to check for changes as they occur.

- Updates can be found at <http://www.acenet.edu/news-room/Pages/Military-Guide-Online.aspx>.

Vocational Certificates

Vocational Certificates are available from most community colleges. Most of your military training can be counted toward their degree programs, but they will still require residency credits and approximately 40-75 credit hours. These certificates can be as valuable as the apprenticeship program in the civilian work force.

College credits by Testing CLEP, DSST

Testing can replace the requirement to attend most of the college courses listed in the Occupational Roadmap. Base Education Centers offer CLEP and DSST exams for active duty military at no cost. They also offer a comprehensive list of "credit-by-exam" tests. Additionally, many of the tests have study guides available. These tests are available at the base education center or through the base library system. For specific testing locations visit the DANTES website.

- Navy College Program: <https://www.navycollege.navy.mil/information-for-sailors/pre-college-testing-and-college-credit.htm>
- DANTES: <http://www.dantes.doded.mil/examinations/earn-college-credit/earn-college-credit.html>

College Entrance Exams Testing ACT, SAT

The ACT and SAT are both standardized tests that help colleges evaluate candidates. Many colleges require that students submit test results as part of the admission application process. Since Sailors are considered transfer students, these tests are not generally required for admission. However, some Sailors must take the tests to enter specific military programs.

- Navy College Program (ACT SAT): <http://www.navycollege.navy.mil/information-for-sailors/college-entrance-exams.htm>
- DANTES (ACT SAT): <http://www.dantes.doded.mil/examinations/college-admissions/act.html>

SAMPLE DEGREE PLAN

Associate in Science

Florida Community College at Jacksonville (http://www.fccj.org/prospective/programs/data07_08/2175.html)

Associate in Science in Telecommunications Engineering Technology (Converged Networks)

<u>General Education</u>		<u>Credits</u>
ENC 1101	Mathematics	3
	Social and Behavioral Sciences	3
	English Composition I	3
	Communications	3
	Humanities	3
<u>Required Professional Courses</u>		
CET 2687	Security+	3
CET 2626	Building Scalable Networks	3
CET 2627	Building Multilayer Switched Networks	3
CET 2628	Building Remote Access Networks	3
CET 2636	Home Integration	3
CET 2660	Managing Network Security	3
CET 2665	Advanced Firewall Administration	3
CET 2481	Designing and Building Wireless Networks	3
CET 2682	Voice over IP (VoIP)	3
CET 2623	Deploying Quality of Service	3
CET 2675	IP Telephony	3
CET 2676	Unified Messaging	3
CET 1943	Internship	3
<u>Professional Electives</u>		
LIS 1002	Information Literacy (Online)	1
CET 2662	Techniques of Computer Hacking and Incident Handling	3
CET 2880	Data Forensics I — Basic	3
CET 1630	Fiber, Voice and Data Cabling	3
Total Credit Hours		64

SAMPLE DEGREE PLAN

Bachelor of Science

Fort Hays State University (<http://www.fhsu.edu/int/telecomm/vccourserequirements.shtml>)

Bachelor of Science in Information Networking and Telecommunications - Computer Networking and Telecommunications Concentration

<u>Information Networking and Telecommunications Major Core</u>	<u>Credits</u>
INT 300 Field of Information Networking: Foundations for Understanding	3
INT 250 Introduction to Web Development	3
POLS/INT 602 Public Policy, Ethics and Law in Information Networking	3
INT 430 Leadership in Information Networking	3
INT 405 Research Methods in Information Networking	3
INT 490 Capstone Seminar in Information Networking	3
<u>Concentration Requirements Computer Networking and Telecommunications</u>	
PHYS 230 Telecommunications Electronics	3
INT 291 Internetworking Certification I	3
INT 680 Network Architecture and Data Communications I	3
INT 681 Network Architecture and Data Communications II	3
INT 293 Internetworking II	3
<u>Cross Concentration Elective Media Studies</u>	
INT 140 Introduction to Electronic Media	3
<u>Cross Concentration Elective Web Development</u>	
INT 651 Advanced Web Development	3
Required General Education Class: COMM 318 Communication in Human Organization	3
<u>Telecommunications & Networking Emphasis Options</u>	
INT 293 Internetworking II (CCNA Prep)	3
INT 685 Fundamentals of Network Security (MCNS, CSPFA)	3
INT 695 Advanced Routing (CCNP Prep 1)	3
INT 696 Advanced Remote Access (CCNP Prep 2)	3
INT 697 Advanced LAN Switching (CCNP Prep 3)	3
INT 698 Internetwork Troubleshooting (CCNP Prep 4)	3
<u>Totals:</u>	
General Education Requirements	55
Department/Major Requirements	54
Free Electives	15
Total	124

SAMPLE DEGREE PLAN

Master of Science

Boston University

(http://www.bu.edu/online/online_programs/graduate_degree/master_management/project_management/courses.html)

Master of Science in Project Management

Core Courses

	<u>Credits</u>
AC 630 Financial and Managerial Accounting	4
FI 741 Financial Management	4
MG 610 Intro to Organizational Risk and Crisis Mang in Both Public and Private Enterprise	4
MG 650 International Business, Economics, and Cultures	4
MG 742 Data Analysis and Operations Management	4
MG 743 Managing Employees, Professionals, and Teams	4
MK 743 Marketing Management	4
TM 648 Introduction to Electronic Commerce, Systems, and Web Design	4

Specialization Courses

AD 642 Program and Project Management	4
AD 643 Project Leadership and Communications	4
AD 644 Project Risk and Cost Management	4
AD 645 International and Advanced Project Management	4

Total	48
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REFERENCES

Navy Enlisted Learning and Development Programs:

- Learning and Development Roadmap for Enlisted Sailors, OPNAVINST 1500.77(series)
- Navy Enlisted Retention and Career Development Program, OPNAVINST 1040.11(series)
- Career Counselor Handbook, NAVPERS 15878L
- Command Sponsor and Indoctrination Programs OPNAVINST 1740.3(series) (Sponsor assigned within 10 days of orders received / Indoctrination completed as soon as possible and practicable but NLT 90 days)
- Command Sponsorship of Dependents at Overseas Duty Stations MILPERSMAN 1300-150 to 1300-210
- Navy Enlisted Warfare Qualification Programs OPNAVINST 1414.9 (series)
- Master Training Specialists (MTS) Program NETCINST 1500.2(series)
- Command Master Chief Program OPNAVINST 1306.2 (series)

Reenlistments and Extensions:

- Agreement of Enlisted Naval Reservist, and Fleet Reservists Inductees to Remain on Active Duty MILPERSMAN 1160-060
- Extension of Enlistments MILPERSMAN 1160-040
- Overseas Tour Extension Incentives Program (OTEIP) MILPERSMAN 1306-300
- Consecutive Overseas Tours (COT) Leave Travel Entitlement Policy MILPERSMAN 1050-410
- Career WayPoints - Reenlistment MILPERSMAN 1160-140
- Reenlistment Ceremony MILPERSMAN 1160-020
- Leave of Military Personnel MILPERSMAN 1050-040
- Required Counseling Upon Enlistment and Reenlistment MILPERSMAN 1160-031
- Selective Reenlistment Bonus (Use Latest SRB NAVADMIN)
- Selective Training and Reenlistment (STAR) Program MILPERSMAN 1160-100
- Assignment to School as a Reenlistment Incentive MILPERSMAN 1306-1006
- Reserve Enlisted Incentives RESPERSMAN 1100-020 and current ALNAVRESFOR Message
- Reenlistments and Extensions for Sailors in a Drilling Status RESPERSMAN 1160-010
- Satisfactory Participation in the Navy Reserve RESPERSMAN 1001-010

Fleet Reserve and Retirements:

- Casualties and Survivor Benefits (SBP) MILPERSMAN 1770-010 to 1770-280 OPNAVINST 1750.5(Series)
- Disability Retirement MILPERSMAN 1850-010 to 1850-040
- Fleet Reserve and Retirement MILPERSMAN 1800-010 to 1800-070
- Privately Owned Vehicle (POV) Shipment Entitlement Policy and Household Goods (HHG) Shipment and Storage Entitlement Policy MILPERSMAN 4050-010 to 4050-020
- Permissive Temporary Duty (PTDY) Authorization for Job/House Hunting MILPERSMAN 1320-220
- Transition Assistance Program (TAP) OPNAVINST 1900.2(series) (Initiate a DD-2648E-1 NLT 90 Days Prior to Separation and attend workshop 12 months prior to separation/Fleet Reserve/Retirement date)

Enlisted Administrative Separations:

- Separation by Reason of Alcohol Rehabilitation Failure MILPERSMAN 1910-152
- Separation by Reason of Misconduct -Drug Abuse MILPERSMAN 1910-146
- Separation by Reason of Convenience of the Government -Early release to further education MILPERSMAN 1910-108
- Administrative Separation (ADSEP) Policy and General Information MILPERSMAN 1910-010 to 1910-812
- Fraudulent Enlistment MILPERSMAN 1910-134
- High Year Tenure (HYT) MILPERSMAN 1160-120
- Misconduct (various reasons) MILPERSMAN 1910-138/140/142
- Department of the Navy (DON) Policy on Parenthood and Pregnancy SECNAVINST 1000.10(series) & MILPERSMAN 1910-124
- Separation by Reason of Convenience of the Government -Personality Disorder MILPERSMAN 1910-122
- Separation by Reason of Physical Fitness Assessment (PA) Failure MILPERSMAN 1910-170
- Separation by Reason of Misconduct - Commission of a Serious Offense MILPERSMAN 1910-142
- Separation by Reason of Unsatisfactory Performance MILPERSMAN 1910-156

Advancement & Service Schools:

- Advancement Manual for Enlisted Personnel of the U.S. Navy and U.S. Navy Reserve BUPERSINST 1430.16(series)
- Accelerated Advancement of Recruit Training Class "A" School Graduates, and Ceremonial Guard MILPERSMAN 1430-010
- Enlisted to Officer Commissioning Program Application & Administration Manual OPNAVINST 1420.1(series)
- Service Schools MILPERSMAN 1306-600/602/604/608
- Class "A" School & Rating Entry Requirements MILPERSMAN 1306-618
- Retesting with Armed Forces Classification Test (AFCT) version of the Armed Services Vocational Aptitude Battery (ASVAB) MILPERSMAN 1236-010
- Professional Apprenticeship Tracks Program (PACT) NAVADMIN 318/07
- Prior Service Reenlistment Eligibility – Reserve (PRISE-R) MILPERSMAN 1133-061

Education Advancement & Service Schools:

- Joint Chiefs Professional Military Education (PME) Manual 1805.01
- Voluntary Education (VOLED) for Navy Sailors OPNAVINST 1560.9(series)
- Navy Voluntary Education Program NETCINST 1560.3(series)
- Navy Credentialing Programs OPNAVINST 1540.56
- Administration of the United Services Military Apprenticeship Programs (USMAP) OPNAVINST 1560.10(series)

Diversity, Equity and Inclusion, and Anti-Extremism:

- Diversity, Equity and Inclusion: <https://diversity.defense.gov>
- DOD Diversity and Inclusion Management Program DODI 1020.05(series)

Other Quick References:

- Awards Manual (SECNAVINST 1650.1(Series))
- Change in Rating MILPERSMAN 1440-010 to 1440-040
- Department of the Navy Correspondence Manual (SECNAV M-5216.5)
- Navy Alcohol and Drug Abuse Prevention and Control OPNAVINST 5350.4(series)
- Exchange of Duty (SWAPS) MILPERSMAN 1306-700
- First-Term Personnel Assignment Policy MILPERSMAN 1306-126
- Individual Augmentation (IA) Policy and Procedures OPNAVINST 1001.24(series)
- Military Couple and Single Parent Assignment Policy MILPERSMAN 1300-1000
- Military Pay MILPERSMAN 7220-010 to 7220-410
- Navy Performance Evaluation System BUPERSINST 1610.10 (Series)
- Overseas Extensions MILPERSMAN 1300-310
- Physical Readiness Program OPNAVINST 6110.1(series) / MILPERSMAN 6100-6199
- Reassignment for Humanitarian Reasons (HUMS) MILPERSMAN 1300-500
- Standardized Policy and Procedures for the Active Duty for Operational Support (ADOS) Programs OPNAVINST 1001.20 (series)
- Operational Risk Management OPNAVINST 3500.39C
- Personnel Qualification Standards (PQS) Catalog NAVEDTRA 43100-6M
- Manual of Navy Enlisted Manpower and Personnel Classifications and Occupational Standards NAVPERS 18068F Volume 1 & 2